APPENDIX E

DELAWARE FINANCIAL MANAGEMENT SYSTEM (DFMS)

The Delaware Financial Management System (DFMS) is a complete automated financial management system designed to support functions performed by the State. In addition to the standard accounting functions, DFMS also performs specialized functions of encumbrance control, fund accounting according to generally accepted accounting principles (GAAP), and grants management. DFMS uses the data supplied by the various State users to maintain a financial data base from which standard and specialized reports can be produced, either at the detailed or summary level.

This appendix is designed and intended for the use of those Agency and School Personnel that will be using the data from and providing data to the Delaware Financial Management System (DFMS) on a day-to-day basis. It can also serve to familiarize financial management personnel with the financial functions supported by DFMS.

In addition, this appendix is a "how to" guide for the completion and use of DFMS forms, error correction and how to retrieve certain organizational budget and financial information on-line instead of waiting for monthly, hard copy, reports.

There are several functions that DFMS can perform that will be mentioned, but not discussed. These functions exist within the frame work of DFMS, but are not being utilized at this time. They can be turned on in part or total for use at any time the State elects to exercise the various capabilities of DFMS.

Specific functions that DFMS performs include:

- Budgeting. Records and adjusts revenue and expense budgets, appropriations and allotment (allotments only if elected for use by the State) for an upcoming fiscal year. Adjusts the current year's budgets, appropriation and allotments. Permits the transfer of appropriations within the laws and guidelines of the State.

- Expenditure Accounting. Records purchase orders, payment vouchers, manual warrants (wire transfers) and intergovernmental vouchers.

- Revenue Accounting. Records monies collected.

- Expenditure Correction. Adjusts incorrectly charged expenditures.

- Closings. Monthly closing summarizes detailed ledger data to a level suitable for reporting. The year-end closing closes out the budget and generates a beginning balance sheet for the new fiscal year.

- Reporting. Includes responsibility reports, ledger reports, and financial management reports.

- Grant Management. Provides an automated mechanism of recording both direct and indirect grant costs and associated revenues.

- Fixed Assets. Maintains property inventories, automatically records them in the general ledger, and calculates and posts depreciation.

There are additional functions DFMS can perform that initially will not be utilized. As these functions are activated, user instructions will be issued. These functions include:

- Job Cost Accounting. Accumulated full costs associated with specific work units (defined as jobs) for billing and reporting purposes.

- Performance Measurement. Maintains non-financial measurements of actual level of services performed.

- Project Management. Provides an automated method for recording and controlling direct and non-direct project costs and associated revenues for the cash phase of a project.

- Investment Management. Maintains investment pools, tracks securities and investment cash flows, and performs interest accruals and allocation to pooled funds.

Although each of the functions outlined above operate independently, the system as a whole is unified with one data base, one set of accounting procedures and one account classification structure.

In DFMS, each budgeting and accounting event enters the system as a transaction and is coded on forms designed especially for each type of transaction. Data on the forms is then entered into the computer and processed by the DFMS programs.

DFMS uses reference tables to store centralized information specific to a particular Agency or School. Most data contained in the reference tables define valid codes to be used when preparing transaction data, i.e. various system processing (control) options and default values are stored in reference tables. DFMS uses the data in the reference tables when it processes transaction data to validate codes, look up missing data and to look up control options. It also uses the tables during report production to associate codes with names or descriptions.

Application files, utilized within DFMS, are updated as a result of transaction processing. These files contain constantly changing accounting and budget data such as the current status of the budget, total expenditures against each line in the budget, all outstanding purchase orders, etc.

There are certain rules that DFMS uses when processing transaction data. These rules are more commonly referred to as edits and controls. Edits are used for the verification of valid data, checks on available funds, use of tables for reference data, prevent processing or produce warnings. Documents containing errors do not have to be re-keyed in their entirety, only corrected.

Controls are user defined selections to control DFMS processing. These controls are established at the State level, however, some controls can be established by the user Agency or School. Controls can prevent overspending, force coding, force the use of appropriations and budgets, force the use of vendor codes, etc.

Transaction data is supplied to DFMS on input forms (documents). DFMS documents consists of two sections. The header contains summary data that applies to a line recorded on the form. A line contains specific information about an individual financial activity. The header/line distinction is important to DFMS processing. It affects the way in which transactions are coded and also the way in which data entry personnel input the information.

Each DFMS document consists of one header and one or more lines (not to exceed 99) that are associated with the header data. A document may have up to 99 lines, but must have at least one.

Transaction codes are required in DFMS. The DFMS transaction code is nothing more than a 2-letter abbreviation for a transaction type. It tells the system what type of data to expect and which document processor (program) to use; i.e., PO for encumbrances, PV for expenditures.

Succeeding sections will describe: the DFMS data base and how this data base is used by the State during processing and reporting; transaction coding and error correction; and a listing of the various financial modules and associated DFMS tables.

A. THE DATA BASE

While the DFMS database consists of five components that will be described, only two - reference tables and application files - will be emphasized.

The five components of the database are:

1. **Reference Tables** which contain centralized information specific to an Agency or School. They are logical files and are only updated by maintenance transactions.

2. **System Control Tables** are logical files that are referenced primarily by the core software controlling programs and are only updated by them.

3. **Application Files** are similar to reference tables, but may be updated by both reference table maintenance and application programs.

4. **Accounts** contains all data from accepted DFMS transactions. Reports, except for reference table listings, use the data from the ledgers. Ledger files are not displayed on terminals.

5. **The Document Suspense File** is a "holding file." It holds transaction data between the time it is entered in the system by data entry personnel, approved by appropriate Agency or School; reviewed, approved and scheduled by Central Agency personnel and the time DFMS document processors accept the documents as containing valid data and processes those documents. When a document has been accepted and processed by the system, it is removed from the Document Suspense File.

   The Document Suspense File also retains rejected batches or documents until errors can be corrected. This eliminates the need to reenter rejected documents.

Two types of tables/files exist in DFMS: user maintained reference tables and system maintained application files.

1. *User maintained tables* are referenced by the DFMS system, but are never changed by the system. Any changes to these tables must be made by the System Administrator.
2. *System maintained files* are updated automatically by DFMS as a result of processing transactions. They cannot be modified directly by users.

Reference tables and application files provide DFMS with a central source of information used during processing and reporting. DFMS uses reference tables and application files in the following ways:

- Validation During Processing. DFMS compares all codes used in transactions against reference tables; any code used must be listed in the reference tables, DFMS rejects the transaction and issues an error message stating that the code is invalid.
- Processing Options and Controls. During processing, there are certain points where DFMS has a choice of two or more ways to handle a transaction. When this happens, DFMS refers to reference tables containing the processing options selected by the user.
- Name Look-Ups for Reports. DFMS uses reference tables to look up code names or descriptions for use on reports. This makes reports easier to read and more meaningful than if they consisted only of a series of codes.
- Reporting Hierarchies. DFMS looks up code hierarchies from reference tables and uses this information to group data on reports. For example, the user never has to code class or category codes on transaction input forms. On reports, any code belonging to a class or category is printed under the appropriate class or category heading.
- Inferring Default Codes During Processing. DFMS uses reference tables to get important data not coded on the transaction input forms needed for processing. For example, the appropriate balance sheet account is derived from the transaction code.
- System Maintained Data. DFMS automatically updates and maintains budget, account balances, open items and other information on application files for validation and on-line inquiry.

Reference has been made to inferring default codes. This refers to one of two ways DFMS handles account codes. There are two ways that account codes are used with transactions. Some are explicitly coded on the transaction input forms and others are inferred. Inferred codes are those that the system looks up in reference tables based on others that are coded on the input form. Inferred codes can be grouped as follows:

- Reporting Hierarchies. These are codes that classify related codes into progressively larger groups (classes, categories, groups and types). The program class code, for example, represents a set of program codes that are related to each other in some manner. Reporting hierarchy codes are defined by fiscal year and used for reporting purpose only. These attributes are not stored in ledgers, but are looked up at the time the reports are run. Any change in a reporting hierarchy is automatically retroactive for all data in the fiscal year. Sub codes, such as sub-object and sub-revenue source are never inferred. They must be coded on transactions.

- Default Codes. There are codes that are required for processing transactions, but are not coded on input forms. They are inferred from tables by the transaction processors and are stored in the ledgers. Some can be overridden on transaction input forms.

Other information besides codes can also be inferred for reporting purposes. Examples include, but are not limited to, name, manager's name and minority vendor indicator. Any data that is stored in a reference table can be inferred for use on reports.

Information contained in the Reference Tables/Application Files can be valuable in day-to-day operations. This information can be accessed on-line with terminal display through the Production Master Table Inquiry (PMTI) facility of DFMS. The PMTI facility is convenient, quick and provides the most up-to-date information. The reference tables can provide ready access to the vendor files for locating a vendor code or address, the object table for object codes, etc. The open items and appropriation application files provide information useful in tracing a transaction or determining the status of an appropriation account.

Examples of some of the more commonly used Reference Tables/Application Files are:

- Suspense File (SUSF)
- Appropriation (APPR)
- Vendor (VEND)
- Vendor Name (VNAM)
- Open Purchase Order Header File (OPPH)
- Open Purchase Order Line File (OPPL)

The examples listed above are just that, examples of real Reference Tables/Application Files. They are by no means all inclusive. A listing of the major Reference Tables/Application File is shown in Exhibit F. The examples are intended to reflect how the information within DFMS is stored and how it can be utilized by a user.

The structure of the Reference Tables/Application Files is important to understand. Information is stored in records and all information on one record is related. Special fields, called key fields, identify a record and distinguish records from each other. A table or file can have more than one key field, but all the key field values for a record are combined to get a unique identification for that record. This means that two records in a table or file cannot have identical values in all their key fields. For example, a vendor is uniquely identified in the Vendor File by its code. To retrieve a specific record, the key must be known; e.g., to look up a vendor's name and address, the vendor's code must be known.

If all the "key" data required to retrieve a specific record is not known, a partial key search may be done. The partial key capability allows the filling-in of an incomplete key. This allows receiving all data in the reference table that matches the partial key.

Maintenance to the Reference Tables/Application Files will be coordinated through the System Administrator. Individual users cannot directly change the data contained in these files.

Exceptions are made to updating the SVEN Table.

A table called the SVEN is currently in PMTI. Its purpose is to alleviate busy phone lines to the vendor file desk, and speed up the process of adding or correcting vendor information to the VEND table. Agencies will key the information directly on the screen. The SVEN table will be continuously reviewed by the Division of Accounting to verify the information. If acceptable, the Division of Accounting will update the VEND table from SVEN.

All vendors that are a business with a Social Security Number (SSN) or and Employer Identification Number (EIN) must have a phone number to be processed for adding, changing or deleting. However, if the business is using a SSN, the individual's name must be included on the first line of the table.

Canadian or foreign vendor

> If they do not have EINs, then you must call the Division of Accounting to be issued a number.

One-time vendors

> Vendors that are considered as a "one time" pay are: election polls, school bus training, ticket takers, group life proceeds, pension refunds, jury payroll and witness fees and revenue refunds. Any other situation must be approved by the Director of the Division of Accounting via a memo.

Inactive vendors

> When a vendor's EIN or SSN is to be changed, a new record will be established. The old vendor record will be given a status of "I" for inactive. As a convenience for DFMS users, all "Inactive" vendor screens will have a replacement vendor code listed in the "changed to" field.

The effect on documents:

> PV against PO's
>
> > PO's with an inactive vendor number will let a PV process against it if the number and suffix on the PV matches the number and suffix in the PV field. If not, notify the Division of Accounting.
>
> Cash receipts
>
> > Vendors inactive will process.

Manual warrants

Vendor inactive do not accept.

EAs or PO MODs

Can do a decrease with an inactive vendor number.

Cannot do an increase with an inactive vendor number. Must call the Division of Accounting vendor phone or state accountant to see if it can be changed.

PO's not accepted with inactive vendors.

IRS levy procedures

Any agency receiving a notice of levy or other information from the Internal Revenue Service (IRS) about a vendor should forward it to the Division of Accounting. They are applied by the central office. Levy's must be applied and removed by written notification from the IRS not by oral communication. Any payments made while the levy is in effect will go to the IRS until a release is received. The IRS will refund the overpaid amount due to the vendor.

Proper vendor addressing of purchase orders

According to postal service requirements, purchase orders should be addressed in the following manner:

First line:	Name of the company or person
Second line:	Attention line, if needed
Third line:	A PO Box or street address
Fourth line:	City, State, Zip Code

B. TRANSACTION CODING AND ERROR CORRECTION

Data is supplied to DFMS by coding input forms. In order for the system to know what type of data to expect and how to process that data, a transaction code is required.

The Transaction Code used by DFMS, is a 2-letter abbreviation for a transaction type. The basic transaction codes used by DFMS are:

Budget

AA Appropriation

EB Expense Budget

- RB Revenue Budget
- TA Transfer

Accounting

- CA Cash Adjustment
- EA Encumbrance Adjustment
- PO Purchase Order
- PV Payment Voucher
- IV Intergovernmental Voucher
- CR Cash Receipt
- JV Journal Voucher
- PR Payroll Voucher (System Generate)
- EX Expenditure Correction
- CX Check Cancellation
- AD Automated Disbursement
- MW Manual Warrant

Fixed Assets

- FA-Acquisition
- FB-Betterment
- FD-Disposition
- FF-Modification
- FS-Internal Scale
- FT-Transfer

Grants

- FM Federal Aid Master
- FC Federal Charges

The above transaction codes are current and in use. As other elements of DFMS are activated additional transaction codes will be utilized.

DFMS documents consist of two sections: header and lines(s). The header contains summary data that applies to all lines recorded on the form. A line contains specific information about an individual financial activity.

A DFMS document consists of one header and one or more lines that are associated with the header data. A document may have multiple lines, but cannot exceed 99, and it must have at least one. Continuation sheets are to be used when the number of lines exceed the available lines on the input document. This process generally applies to Purchase Orders and Payment Vouchers. For other documents, if additional lines are required, they can be continued on another document with the header section left blank. The document total is a part of the header information and is equal to the sum of all the lines from continuation sheets or documents that make up the entire document (under one document number).

Each DFMS document has certain unique coding requirements. However, there are general points applicable to all documents. The general points are as follows:

- For most accounting transactions only one side of the transaction has to be coded by the user; DFMS automatically generates the balancing entry. The Journal Voucher transaction, which will not be used by Department/Schools, but only utilized by the Division of Accounting is the exception. This form must have both sides (debit and credits) of the transactions coded by the user.

  - All dates must be coded with two digits representing the month, two digits for the day and two digits for the year. All digits must be numeric. For example, July 1, 1994 would be coded 07 01 94 (NOTE: There are no dashes).

  - In coding dollars and cents, do not enter commas or dollar signs. Decimal points must be entered. The use of dollar signs, commas or negative amount indicators may be used on the actual document but cannot be used in data entry.

  - When entering codes from reference tables be sure that the code is exactly the way it is listed in the reference table.

  - If the coding instructions for a document indicate that an item is required it means that DFMS will not accept the entry unless that item is coded.

  - Make sure that header data is true for all lines in the document. Make sure that the total dollar value is the total of all amounts in the document.

In DFMS, some documents will be processed in a batch environment. A batch consists of a group of documents with the same transaction code. Thus, for an example, a batch will consist of only original purchase orders or only payment vouchers. Modifications to existing open documents must be batched separately from original entry transactions of the same transaction code. The batch can vary in size for one document to many documents. As a batch processes, only those documents that fail to pass various system edits checks are rejected, not the entire batch; unless there is a batch level error.

For example, the entire batch will be rejected if the number of documents in the batch or the total amount of the batch does not agree with the batch control data.

A batch ticket form must be attached to a group of documents before the batch is submitted for data entry, and then forwarded to the Division of Accounting, the Budget Office or the Treasurer's Office for final approval and processing.

It is recommended that a control log be developed and utilized at the local level. Each batch should be entered in the control log. This will serve two purposes; one, to prevent duplicate batch numbers and enable the user to know what type of document is in each batch, and two, to provide a mechanism to record when a batch has been processed.

Exhibit E-1, on the following page, illustrates a completed batch ticket for purchase orders. The same information will be required regardless of the type of transaction. The numbers in parenthesis reference the coding instructions for the batch ticket.

Batch Ticket Coding Instructions

1 **Transaction Type - Required**. Check appropriate box for the type of transactions in the batch.

2 **Transaction Code - Required**. Enter the 2-letter transactions code of the documents in the batch. All documents in the batch must have the same transaction code.

3 **Department Code - Required**. Enter the 2-character code identifying the department submitting the batch.

4 **Batch Number - Required**. Enter a letter/number combination used to identify the batch. The number is assigned by the submitting department, within a general structure identified by the Division of Accounting.

5 **Batch Date - Required**, Enter the date the batch is submitted. Fields must be filled with 2-characters each for month, day and year (MM, DD, YY).

6 **Number of Documents - Required**. Enter the number of documents contained in the batch. Use all four blocks, using zeroes to fill in as required.

7 **Amount - Required**. Enter the total of all document totals in the batch. Treat any negative document amounts as a plus for batch total purposes.

8 **Names - Required**. Individual preparing and/or entering the batch of documents should sign and date the batch ticket.

NOTE: The batch number must be recorded on all documents within a batch. This will aid in future reference should any questions relative to a particular batch arise.

In the data entry process for documents, there are certain types of data checks performed by the system. Included in the data checks are the following:

- Comparing codes against reference tables to make sure that all codes used are valid.
- Validating codes against reference documents to make sure that all codes on the two documents match.
- Validating the integrity of the batch by checking whether the amounts and number of documents entered from the batch ticket agrees with the systems generated amounts and document count.
- Ensuring that all necessary codes are provided.
- Check amounts against various controls and system options to make sure that they are valid according to the accounting and budgeting rules established by the State.
- Ensuring that dates reflect open accounting periods.

Once this process has been completed at the user level and the batch is held in the suspense file, the hard copy batch of documents is forwarded, when required, to the appropriate Central Office (Division of Accounting, State Treasurer, Budget Office). Here, the batch is reviewed, approved and scheduled for over night processing.

In the processing cycle, each program has its own set of additional checks to make. If all lines of a document pass the validation check outlined above, processing continues with activities that make the data in the document a permanent part of the financial system by:

- Updating various ledger files.
- Creating offsetting entries for Accounting transactions.
- Updating the system maintained application files as required.

If any one code, amount or date failed the validation checks, the updating part of the processing will not take place. When an error is found, an error message will appear on the screen and the document is rejected. Validation continues to the end of the document, however, so that all coding errors can be identified during one processing run.

A rejected line on the document will cause the entire document to be rejected. The document is not lost, but remains in Suspense for corrective action. Data in a rejected document is not posted to the ledgers and does not update reference tables or files. A rejected document does not reject an entire batch, all documents that pass the validation checks will be processed. However, a batch level error (batch count incorrect or total batch dollars out of balance) will reject the entire batch.

After corrections have been made to the rejected documents or batch, the batch is re-processed, subjected to the same validation as the first time and either accepted or rejected.

Rejected batches or documents remain accessible indefinitely as long as errors still exist in the documents/batch. Once corrections are made and the batch/documents is accepted, it is no longer accessible for changes.

Errors that can cause a transaction to be rejected are:

- Keying errors; for example, header data was omitted or typing errors were made.
- Coding errors on the input document; for example, an invalid account code was recorded on the document.
- Accounting inconsistencies; for example, an entry caused an appropriation to exceed its spending limits.

Remember that if one line of a document is rejected, the entire document is rejected. During data entry, errors will be shown on the screen enabling immediate correction. If error messages appear, it is imperative that corrections be made at that time.

The error messages appear at the bottom of the screen identified by a letter, a 3-digit number identifying the message, a E or W followed by a brief description of the message. A listing of the error messages are contained in Appendix H. The letter E or W following the 3-digit numeric code identifies the message as either an error (E) or a warning (W). Warnings are not reasons for rejections, but only cautions of a condition that may require attention now or in the future.

DFMS documents contain an area in the header for Accounting Period. This is a default code in the system and as such is normally left blank. The Accounting Period, as used in DFMS, identifies the month of the fiscal year and is identified as YYMM. The YY is the last two digits of the fiscal year and the MM is the fiscal month; for example, July would be fiscal month 01, August 02, etc.

DFMS DAILY INFORMATION TABLE DINF

- This Table is not in PMTI, you simply type the Table identification on a blank screen and hit the appropriate key to enter.

OIS DAILY INFORMATION TABLE INFO

- (Same explanation as "DINF")

TO FIND OUT TERMINAL IDENTIFICATION PCCC

- This screen is not in PMTI, you simply type the screen identifier on a blank screen and hit the appropriate key to enter.